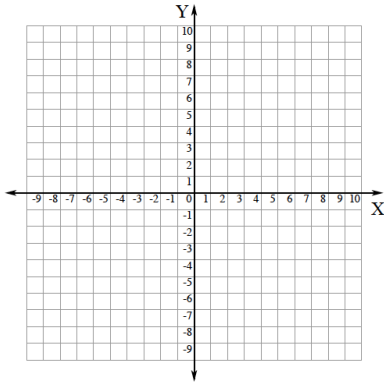


Algebra 2  
Quadratic Functions WS #7

Name \_\_\_\_\_

For each function, give the equation of the axis of symmetry, the coordinates of the vertex, and the x- and y-intercepts. Sketch the graph of the function.

1)  $y = x^2 + 2x$



For each function, give the equation of the axis of symmetry, the coordinates of the vertex, and the x- and y-intercepts.

2) $y = x^2 + 4x$	3) $y = -x^2 + 6x$
4) $y = 2x^2 + 7x + 3$	5) $y = 3x^2 - x - 2$

Determine whether each function has a maximum or minimum value. Then find that value.

6) $y = -x^2 + 4x + 4$	7) $y = 3x^2 - 5x - 2$
8) $y = -3x^2 - 2x + 5$	9) $y = 3 - x^2$